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10/538,512

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Koji Ishii

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT

PAPER NUMBER

2862

MAIL DATE

DELIVERY MODE

11/01/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/538,512

Applicant(s)

ISHII ET AL.

Examiner

Rochelle Blackman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 June 2005 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/26/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 5, and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimori (U.S. Patent Application Publication No. 2002/0140907).

Regarding claim 1, Fujimori discloses (see Figs. 1-15) a projection type video display (1000) that modulates light emitted from a light source (120) by a light valve (300R, 300G, 300B) and projects the modulated light, comprising: an ion wind generator (see *...filter arranged at the ventilation passage of the second cooling fan 620... and/or ...filter is provided at the air intake of the second cooling fan 62...* in paragraph [0120]) for generating air flow by ionizing air and molecules in the air using an electrode on one side and drawing ions generated by the ionization by an electrode on the other side (note: "generating air flow by ionizing air and molecules in the air using an electrode on one side and drawing ions generated by ionization by electrodes on the other side" is not positively recited and therefore, considered function language that does not further limit the claim, the claim is only required to have an ion wind generator however still see PCF in FIG. 7 and paragraph [0087]); and an ozone removal filter (see PCF in FIG. 7,

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see ...*photocatalyst...provided to the ventilation passed of cooling fan 620...* in paragraph [0120]) provided on a path of the air flow.

Regarding claim 2, Fujimori discloses a projection type video display according to claim 1, wherein the ozone removal filter is provided on a path of the air flow warmed by drawing heat generated in the video display (the above described "ozone removal filter" is provided near light source 120 in Fig. 12).

Regarding claim 3, Fujimori discloses a projection type video display according to claim 1, wherein the ozone removal filter is provided in a position on a path of the air flow and in the vicinity of the light source (the above described "ozone removal filter" is provided near light source 120 in Fig. 12).

Regarding claim 5, Fujimori discloses a projection type video display according to claim 1, wherein the ion wind generator is so provided as to take air outside the video display into the video display (see ...*filter is provided at the outlet of the second cooling fan 620...* in paragraph [0120]).

Regarding claim 6, Fujimori discloses a projection type video display according to claim 5, wherein dust is caught by the electrode on the other side of the ion wind generator (although "electrode" is not positively recited as described about, but see ...*dust adhering to the filter...* in paragraph [0119]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori (U.S. Patent Application Publication No. 2002/0140907) in view of Heintz et al. (U.S. Patent No. 6,056,405).

Fujimori discloses the claimed invention except for the reflector composing the light source transmitting "infrared light and the infrared light is guided to the ozone removal filter".

Heintz teaches providing a reflector (106 of FIG. 3) composing a light source (see 112 of FIG. 3) that transmits infrared light (see col. 7, lines 9-11) and a fan that directs cooling air flow through openings in a lamp frame and across the lamp-reflector assembly.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a "reflector that transmits infrared light" in the Fujimori reference, as taught by Heintz as well as "guide the infrared light to the ozone filter", for the purpose of facilitating cooling of the reflector and light source and reduce heat transfer from the light source (see col. 3, lines 21-27).

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2. Claims 7/1, 7/2/1, 7/3/1, 7/5/1, 7/6/5/1, 8/1, 8/2/1, 8/3/1, 8/5/1, and 8/6/5/1 are is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori (U.S. Patent Application Publication No. 2002/0140907) in view of Tenney (U.S. Patent No. 3,899,684).

Fujimori discloses the claimed invention except for "a sensor for detecting temperature or ambient temperature of the ozone removal filter; and a control means for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature; wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off".

Tenney teaches providing a sensor (see 37 of FIG. 1) for detecting temperature or ambient temperature of a ozone removal filter (see 2 of FIG. 1); and a control means (see 39 of FIG. 1) for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature (see col. 5, line 38 to col. 6, line 20); wherein the ion wind generator is turned on or off when a predetermined time period has passed after the ion wind generator was turned on or off (also see col. 5, line 38 to col. 6, line 20).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the ozone removal filter and ion wind generator with a

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"sensor" and a "control means" in the "projection type video display" of the Fujimori reference, as taught by Tenney for the purpose of preventing overheating of ion wind generator and ozonized air in the "projection type video display" (see col. 2, lines 20-25).

3. Claims 7/4/3/1 and 8/4/3/1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimori (U.S. Patent Application Publication No. 2002/0140907) in view of Heintz et al. (U.S. Patent No. 6,056,405) as applied to claim 1 above, and further in view of Tenney (U.S. Patent No. 3,899,684).

Fujimori and Heintz discloses the claimed invention except for "a sensor for detecting temperature or ambient temperature of the ozone removal filter; and a control means for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature; wherein the ion wind generator is turned on or off when a predetermined time period has passed after the light source was turned on or off".

Tenney teaches providing a sensor (see 37 of FIG. 1) for detecting temperature or ambient temperature of a ozone removal filter (see 2 of FIG. 1); and a control means (see 39 of FIG. 1) for turning on the ion wind generator when the temperature is equal to or higher than predetermined temperature and turning off the ion wind generator when the temperature is lower than the predetermined temperature (see col. 5, line 38 to col. 6, line 20); wherein the ion wind generator is turned on or off when a

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predetermined time period has passed after an temporary interruption of high voltage (also see col. 5, line 38 to col. 6, line 20).

It would have been obvious to one ordinary skill in the art at the time the invention was made to provide the ozone removal filter and ion wind generator with a "sensor" and a "control means" in the "projection type video display" of the combined Fujimori and Heintz reference, as taught by Tenney for the purpose of preventing overheating of the ion wind generator and ozonized air in the "projection type video display" (see col. 2, lines 20-25).

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

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1. Claims 1, 3, and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 7 of copending Application No. 10/944,825. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "projection type video display..." of claim 1 is met by the *projection type video display* of claim 1 of copending app. '825; the "ion wind generator..." of claim 1 is met by the *wind blower* of claim 1 of copending app. '825; the "ozone removal filter..." of claim 1 is met by the *ozone removal filter* of claim 1 of copending app. '825; the "ozone removal filter is provided in a position on a path of airflow and in the vicinity of the light source" of claim 3 is met by the *...wind blower and the ozone removal filter are arranged behind the light source* of claim 1 of app. '825; and the "reflector composing the light source transmits infrared light and infrared light is guided to the ozone removal filter" of claim 4 is met by the *light source comprises a cold lamp whose reflector is constructed with a cold mirror which transmits infrared ray and, the infrared ray emitted from the cold lamp is introduced into the ozone removal filter* of claim 7 of copending app. '825.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

2. Claims 1 and 3 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 8 of copending Application No. 11/087,736. Although the conflicting claims are not identical, they are not patentably distinct from each other because the "projection type video display..." of claim 1 is met by the *projection type video display* of claim 1 of copending

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app. '736; the "ion wind generator..." of claim 1 is met by the *wind blower* of claim 1 of copending app. '736; the "ozone removal filter..." of claim 1 is met by the *catalyst filter* of claims 1-3 and *ozone removal filter* of claim 8 of copending app. '736; and the "ozone removal filter is provided in a position on a path of airflow and in the vicinity of the light source" of claim 3 is met by the ...*wind blower and the catalyst filter are arranged behind the light source* of claim 2 and the *ozone removal filter being arranged at the back of said catalyst filter arranged at the back of said light source* of claim 8 of app. '736.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

Applicant's arguments filed July 26, 2007 have been fully considered but they are not persuasive.

Applicant argues on pg. 2 and 3, under **REMARKS**:

The Examiner asserted that Fujimori discloses an optical component and projector identically corresponding to what is claimed. This rejection is respectfully traversed.

Applicants submit that Fujimori et al. does not identically disclose a projection type video display including all the limitations recited in independent claim 1. Specifically, Fujimori does not disclose, at a minimum, "an ion wind generator for generating air flow by... drawing ions generated by the ionization by an electrode on the other side," as recited in the claim.

It appears that the Examiner asserted, referring to a "filter arranged at the ventilation passage of the second cooling fan 620," that the claimed ion wind generator is disclosed in Fujimori. However, the reference simply describes, "This second cooling fan 620 is a sirocco fan for creating an air flow from the interior to the outside of chassis 800..."

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(paragraph [0105]) and "a filter having a photocatalyst affixed thereto could be provided to the ventilation passage of the second cooling fan 620" (paragraph [0120]). It is also considered that the photocatalyst is applied to the filter because of reduction of "clogging of the holes on the surface of the filter 612" (paragraph [0114]). Accordingly, Fujimori is silent on the generating of air flow by ionizing air and molecules in the air using an electrode on one side and the drawing of ions generated by the ionization by an electrode on the other side, as claimed.

The examiner disagrees and maintains Fujimori discloses the claimed invention. According to the PCF in FIG. 7 and paragraph [0087], the *filter arranged at the ventilation passage of the second cooling fan 620... and/or ...filter is provided at the air intake of the second cooling fan 62* in paragraph [0120] is an "ion wind generator", which what the claim calls for. Although the limitation or language, "generating air flow by ionizing air and molecules in the air using an electrode on one side and drawing ions generated by ionization by electrodes on the other side" is not positively recited and is function language that does not further limit the claim, the PCF in FIG. 7 and the description given in paragraph [0087] still reads on the functional language. Accordingly, Fujimori, Fujimori in view of Heintz, Fujimori in view of Tenney, and Fujimori in view of Heintz and Tenney still reads on the "claim" invention.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

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TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RB



ROCHELLE BLACKMAN
PRIMARY EXAMINER